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SEASONAL AND AGE-RELATED DYNAMICS OF INFECTIOUS LARYNGOTRACHEITIS IN POULTRY FARMS

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Summary: *According to the results of the study, it was found that infection laryngotraxeitis is a common infectious disease in some regions of the region, especially among young chicks,35-50% of which there are between 10-12.5% of deaths, and a timely immunoferment analysis of diseases has achieved a quick diagnosis (there is or not a patient) and the correct conduct of measures against them. Recommendations were made to the LLC for the prevention and fight against infectious laryngotraxeitis and to the existing poultry and poultry farm specialists in the population.*

Keywords: *laryngotracheitis, immunoglobulin, vaccine, immunity, immunophone, antigen, epizootology, clinical, pathologoanatomics', bacteriologist, virologist, epidemiology, pathobiology.*

Relevance of the topic. Poultry farming has a special place in the Agriculture of the economy of our republic, and great importance is attached to the development of this sector by our government. One of the main branches of animal husbandry, the

development of poultry farming and increasing the profitability of limited liability societies, increasing the head number of poultry in farmers and personal auxiliary farms, increasing their productivity, healthy chick acquisition, and proper care, depends on factors such as maintenance from various diseases. Various diseases of poultry are considered a major threat to poultry farming. It is known to everyone that infection laryngotracheitis among poultry is one of the problems that cause great economic damage. In veterinary medicine, the lack of biological and chemical preparations further complicates the problem, allowing for a wider spread of disease. In the following years, a number of decisions have been developed by our government in order to ensure the food safety of people in our country, develop poultry farming, meet the demand for livestock products (meat, milk, eggs).

In particular, the decree of the president of the Republic of Uzbekistan "on the development strategy of the new Uzbekistan for 2022-2026" No. PF-60 of January 28, 2022, PQ-4015 of November 13, 2018" additional measures for the further development of poultry farming", PQ - 187 of March 31, 2022"measures for further improvement of the personnel system in the field of Veterinary and livestock, The decisions of PQ-281 of June 15, 2022 "on measures to further improve the state support system for the poultry sector"and the implementation of tasks set out in other legal and regulatory documents related to this area will serve to a certain extent the research within this dissertation.

The prevalence of the disease in poultry farming, especially among chickens, is greatly detrimental to the economy of farmers who are involved in very copious poultry farming. The mortality rate of poultry infected with the above-named disease among poultry is 80-85%. A significant amount is spent on the treatment of sick poultry and measures to combat the disease. Chicks that have recovered from the disease are left behind in growth and development relative to their tengqur and become carriers of this disease pathogen. No special complex methods and means have been developed for diagnostic, therapeutic and preventive measures for this

disease. To apply biopreparations produced in foreign countries, it is necessary to spend a lot of time and currency.

Object and methodologies of research. The research was carried out at the Microbiology Laboratory of the Veterinary Research Institute and the Institute's Kashkadarya Experimental Station. In some regions of the Republic, poultry farms were conducted on the basis of experiments on the detection of the prevalence and pathomorphological changes in infectious lorengotracheitis among chickens, as well as methods of diagnosing the disease.

In laboratory experiments, infected and undamaged adults with infectious larengotracheitis in natural conditions were carried out in" Loman Brown classic and Loman LSL classic", as well as chickens of the local breed.

In order to study the pathomorphological changes in internal organs, changes were identified by preparing histopreparations based on general rules from them.

Results of the study. The prevalence of larengotracheitis among poultry as well as etiological factors have been studied. To do this, an epizootic case of infectious diseases found among poultry in 5 farms of the Kashkadarya region was examined. For inspection, it was selected based on the recommendation of the veterinary service personnel of poultry factories. In factories, all poultry were subjected to a clinical examination, their patients were isolated and treated, and poultry that died or were forcibly slaughtered were subjected to pathologoanatomic examinations. It became known to what extent veterinary-sanitary, feeding, preservation events were organized. Diseases were diagnosed based on the results of the examination of epizootological, clinical, pathologoanatomic, bacteriological, virological IFA. Based on the results of research on poultry farms, farms, clusters, LLC and existing poultry in private entrepreneurs of the Kashkadarya region, the incidence of poultry in the regions where infectious laryngotracheitis was tested was 3-80 percent compared to the total number of 25,270 heads examined, and the mortality rate from the disease was around 37.8 percent. According to the results of the study, it was found that infectious laryngotracheitis is a common infectious disease in some regions of the

region, especially among young chicks,35-50% of which up to 10-12.5% of deaths are observed, and a timely immunoferment analysis of diseases has achieved a quick diagnosis (whether there is a patient or not) and the correct conduct of measures against them. Recommendations were made to the LLC for the prevention and fight against infectious laryngotraxeitis and to the existing poultry and poultry farm specialists in the population. In our research work, the following clinical signs were observed in poultry infected with the infectious laryngotracheitis virus: the latent period of the disease lasted from several hours to 2 – 3 days. The disease took the form of acute, acute, semi-acute. In the acute course, the clinic of ILT was observed, mainly due to the sudden illness of the chicks. They suddenly dormonized, and the body temperature (up to+43.5 - 44°C) rose rapidly. In poultry affected by the virus, pus flow from the nose with foamy exudate on the inner floor of the eye, deep injuries in the trachea and bronchi as well, yellow purulent exudate and blood clots on the larynx and mucous membrane were observed, and sometimes the heart rate, breathing was accelerated by the accumulation of mass in the eyeball, cornea damage, sinusitis, rhinitis, Sick Chicks were exhausted, only lying down, their beaks were dry, and blood clots were observed on the mucous membranes of the eyes. It was in a comatose state between 1-2 days, and the process was fatal. According to data, the occurrence and spread of the disease occurs in a manner related to the inconvenience of external environmental factors and the fact that hot and humid conditions provide an opportunity for constant circulation of pathogens of diseases of the upper respiratory tract in the external environment, and in most poultry farms-low sanitary conditions and other conditions[6; 17-18-b., 5; 4276-4277 P.]. In some districts of the Kashubian province, the dynamics and mortality rates of avian infective laryngotracheitis are associated with the seasonality of laryngotracheitis infection. For example: in our studies, the disease manifested itself mainly in the highest rates in April-may of spring and October-November of autumn. It was during this period that 884 heads (3.5%) of the 25,270 heads (100%) of poultry examined during the studies fell. There was an increase in incidence from April to June, a

further decrease from June and a re-increase from October to November, with a 2.0-3.0 percent incidence compared to the total April – November avian population. It was recognized that this is the highest result in our research.

The co-occurrence of laryngotrachetes and colibacteriosis in the avian population was studied in the same organism and their mortality rates were determined. The highest number of deaths occurred in November-April, when the death rate for sick poultry was 56%.

Similar results have been reported in literature data of infective laryngotracheitis (ILT) virus-infected poultry with foamy exudate on the inner floor of the eye, leakage of pus from the nose, deep jarochates in the trachea and bronchi, yellow purulent exudate on the larynx and mucous membrane, as well as blood clots, and sometimes eye apples, damage to the cornea, sinusitis, rhinitis, accumulation of caseose mass in the visual sacs. Disease triggers were found in damaged cells of the epithelium of the larynx, trachea, conjunctiva, lungs, cloaca, air sacs of the mucous membrane on the 1-5th day of the disease in infected poultry, as a result of which it was recorded that the disease appeared up to 100%, with a death rate of 10-30% [7; 21-31-b., 4; 173-179 P., 3; 104-109 P.].

In the first 1-5 days of Chick life, up to 62.3 percent of cases or 37.8 percent of them had deaths, while in the following days the amount of cases went to kamaya and amounted to 5.3 percent in the 22-30 days, while in 9.3 percent of them there were deaths (diagram 1).

Diagram 1. Dynamics of damage and death of poultry with infectious laryngotracheitis

When the age dependence of avian infection and death from laryngotraxeitis was ctathistically analyzed, it was also statistically proven that there is an inverse, analytically expressed linear relationship (y=a+bx; R>-0.86) between them according to their orientation, higher correlation coefficient, i.e. higher incidence and mortality of chicks in the early days (days 1-5)

According to the results of our studies, it was found that on 22-30 days the incidence was 5.3 percent and the mortality rate was 9.3 percent, that is, the percentage of deaths increased by 1.75 times.

Conclusions: The prevalence of lorengotracheitis among poultry has been studied as well as major economic damage to poultry farms, as well as the course and spread of the disease in these farms. Also in the diagnosis of the disease, great importance was attached to the epizootic State, clinical signs, pathologoanatomic and pathogistological changes in diseases. Detection of the causative agents of the disease was carried out on the basis of bacteriological and virological methods of IFT examination. As a result, in our scientific research work, it was found that the course of the disease lorengotrachitis is much more severe and complex in young chicks than in chickens in natural conditions.

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